

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



November 1, 2004

Gary L. Palo
Project Manager
FPL Energy
6 Belcourt Drive
Newport Beach, CA 92660

Dear Mr. Palo,

BLYTHE ENERGY PROJECT TRANSMISSION LINE MODIFICATIONS PETITION

Pursuant to Title 20, California Code of Regulations, section 1769, the California Energy Commission staff, Western Area Power Administration (Western) and Bureau of Land Management (BLM), requests the information specified in the enclosed Data Requests. The information requested is necessary for us to more fully understand the project and assess whether the project will result in adverse impacts.

This set of Data Requests (#1-99) is being made in the areas of biological resources, cultural resources, geology and paleontology, land use, socioeconomics, soil and water resources, traffic and transportation, transmission systems engineering, visual resources, waste management, worker safety and fire protection, and alternatives. The Data Requests were developed as a result of staff's review of the Blythe Energy Amendment Petition and comments provided by Western. The comments from Western have been docketed and, where data was requested, incorporated into this document. Written responses to the enclosed Data Responses are due to the Energy Commission staff on or before November 30, 2004 or at such later date as may be mutually agreed.

If you are unable to provide the information requested, or object to providing the requested information, you must send a written notice to the Presiding Committee Member assigned to the Blythe Energy Transmission Line project and to me, within 10 days of receipt of this notice. The notification must contain the reasons for not providing the information, and the grounds for any objections (see Title 20, California Code of Regulations, section 1769).

If you have any questions, please call me at (916) 653-0062, or E-mail me at [jcaswell@energy.state.ca.us].

Sincerely,

Jack W. Caswell,
Energy Facility Siting Project Manager

Enclosure
cc: POS

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Data Requests, (99-AFC-8C)

Technical Area: Biological Resources

Author: Stuart Itoga

BACKGROUND

It is staffs' understanding that the information necessary for a Biological Assessment (BA) has not been completed. It is important that this information be completed and submitted to the United States Fish and Wildlife Service (USFWS), Western and BLM so that it can be reviewed for adequacy.

DATA REQUEST

1. Provide a schedule that outlines dates for document submittals starting with initial submittal of the draft BA to Western and the date when the BA would be as accepted and complete by the USFWS, Western and BLM.
2. Provide staff with copies of all drafts, revisions and the final BA. Include all responses to applicant's submittals from the USFWS.

BACKGROUND

Information submitted by Blythe Energy (BE) indicates that biological resource surveys were conducted during spring 2004. Special-status species with potential to occur in the proposed transmission line corridor were addressed by compiling survey information from other projects in the area. These surveys appear to have been conducted in 1994, 2000, and 2002. Of particular concern is the apparent lack of 2004 USFWS protocol-level desert tortoise surveys.

DATA REQUEST

3. Please provide detailed information on protocol-level desert tortoise surveys conducted for the project. Include dates, locations, and names and qualifications of the people who conducted the surveys. Graphically illustrate where surveys were conducted relative to the existing and proposed transmission line corridors. Include areas of the existing and proposed transmission line corridors that were not surveyed according to USFWS protocol.
4. Provide copies of the most current studies estimating desert tortoise populations in the proposed project area.

BACKGROUND

Applicant discusses Sub-alignment 1 considered for sections of transmission line from Alligator Rock to Julian Hinds in the Desert Center area, and Sub-alignment 2 access to Julian Hinds from the east. Staff's understanding of these sub-alignments is that they are alternative and not preferred routes.

DATA REQUEST

5. Provide a discussion on the significance of Alligator Rock to Biological Resources.

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6. Provide an analysis to support the statement that there is no significant difference in biological resource impacts between Sub-Alignment 1 and the proposed route (Section 3, Subsection 3.5.4.2.3, pg. 3-48).
7. Provide a discussion to support the statement that there is no significant difference in biological resource impacts between sub-alignment 2 and the proposed route (Section 3, Subsection 3.5.4.2.4. pg. 3-49).

BACKGROUND

Transmission lines require periodic maintenance. Provide more information on the scope of maintenance activities that will be required for the project.

DATA REQUEST

8. Provide a discussion of what activities would be necessary to maintain the transmission lines and the frequency of occurrence. Include a list of the activities and the types of equipment that would be needed. Include acreage impact calculations for activities associated with transmission line maintenance activities.

BACKGROUND

Applicant indicated that habitat around the Blythe Energy Project (BEP) site, the proposed Midpoint Substation and the proposed transmission line between the Buck substation and the proposed Midpoint Substation is not desert tortoise habitat. Applicant indicates that desert tortoise habitat begins at milepost 11.4 (Figure 5.5-3A, BEP 2004).

Staff understands that the desert tortoise was not observed on the BEP site during surveys conducted in 1999 or during general biological resource surveys for the proposed transmission line in 2004. However, assessments made by Energy Commission, California Department of Fish and Game (CDFG), and U.S. Fish and Wildlife Service (USFWS) staff, determined that the habitat was/is suitable to support the desert tortoise. Failure to detect target species during surveys indicates that the target species were not observed at the time surveys were conducted.

Habitat between milepost 3 and milepost 7 is the same as the habitat occupied by the BEP. The area proposed for the Midpoint substation and the area from milepost 7 to milepost 11.5 is also the same as BEP habitat. It was agreed by staff from the Energy Commission, USFWS, and CDFG that the BEP site was desert tortoise habitat and mitigation measures would be needed to reduce impacts to levels less than significant. This habitat assessment was validated during the Energy Commission licensing process (open to public review and comment) for the BEP.

DATA REQUEST

9. Please provide evidence (e.g. scientific studies) that the aforementioned habitat is not desert tortoise habitat. Indicate how the habitat has physically changed

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during the period between licensing of the BEP and surveys conducted for the transmission line amendment.

10. Propose mitigation for direct and indirect impacts to desert tortoise habitat associated with construction and operation of the Midpoint Substation and the area between milepost 3 to milepost 11.5.

BACKGROUND

Applicant indicated that preparation of staging/laydown areas would cause habitat disturbance adjacent to the Julian Hinds Substation and near Desert Center.

DATA REQUEST

11. Provide a description of the biological resources near these areas and a discussion of what site preparation work is proposed for the Desert Center and Julian Hinds construction staging/laydown areas. Include the amount of acreage disturbed at both areas.
12. Discuss how impacts to these areas will be mitigated.

BACKGROUND

The proposed project could affect wildlife listed as sensitive by the Bureau of Land Management (BLM). Other species that could be affected are listed as Species of Concern by the State of California.

Impacts to Harwood's milkvetch (CNPS List 2) associated with construction and operation of the BEP required mitigation to reduce levels to less than significant. There are some California Natural Diversity Database (CNDDDB) records of Harwood's milkvetch observations along the proposed transmission line route between mileposts 7 and 16. One observation for Harwood's milkvetch appears to be on the site of the proposed Midpoint Substation. Habitat in these areas is suitable to support Harwood's milkvetch and other sensitive plants. Additionally, there are some observations of the Mojave fringe-toed lizard (BLM-sensitive, State-species of concern) recorded in the CNDDDB.

It appears that suitable habitat to support the Mojave fringe-toed lizard exists in some of the project area including the Mid-Point Substation. Given the level of construction activity proposed for the project, it seems likely there would be take of the Mojave fringe-toed lizard.

DATA REQUEST

13. Analyze the number of acres of suitable Harwood's milkvetch habitat potentially affected by the project. Propose mitigation for direct and indirect impacts to Harwood's milkvetch associated with the construction and operation of the proposed Midpoint Substation and area between mileposts 7 and 16.

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14. Analyze the number of acres of suitable Mojave fringe-toed lizard habitat potentially affected by the project. Propose mitigation measures to protect and compensate for impacts to Mojave fringe-toed lizard and habitat.
15. Analyze the projects impacts to the following plants listed by the California Native Plant Society (CNPS): Abram's spurge, Cove's cassia, Crucifixon thorn, Mesquite nestraw, Orocopia sage, and Spearleaf. Provide locations where suitable habitat exists to support the species and provide impact acreage calculations. Propose mitigation for project impacts to the aforementioned plants.
16. Provide an analysis for impacts to BLM sensitive, and state species of concern. List the species potentially affected and areas where suitable habitat exists to support them. Provide impact acreage for each species and propose mitigation.

BACKGROUND

Applicant indicates that constructing and operating some of the project would cause impacts to microphyll woodland.

DATA REQUEST

17. Provide an analysis addressing project impacts to micropyll woodlands. Include locations and acreage of microphyll woodland, types of impacts, and impact acreage amounts. Discuss the locations where proposed activities would avoid the habitat and where the project would cause impacts.

BACKGROUND

CEQA guidelines define cumulative impacts as a project's incremental contribution to what can be a cumulatively significant impact. Although a project's individual contribution may be minor, when compared to other past, present, and reasonably foreseeable future projects the project may still have significant cumulative impacts.

DATA REQUEST

18. Provide an analysis of the project's individual contribution to cumulative impacts when considered together with other past, present, and reasonably foreseeable development including transmission lines within the same corridor.

BACKGROUND

Predation of the desert tortoise by the common raven has been identified as one source contributing to the decline of desert tortoise populations. Ravens are more abundant in areas disturbed by humans. Transmission lines offer perch and roost sites for ravens. In comparing raven densities among roads, open desert, and powerlines, three studies showed that raven numbers were highest along power lines (Austin 1971, FaunaWest Wildlife Consultants 1989, Knight and Kawashima 1993).

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The project would be constructed adjacent to existing transmission lines, and other transmission lines besides the Blythe I line have been proposed. The project would provide additional perch and roost sites for ravens.

DATA REQUEST

19. Propose a plan for mitigating the proposed project's contribution to raven perch and roost sites and predation of the desert tortoise by ravens.

BACKGROUND

Avian collisions with power lines have been a concern for some projects. Avian collisions with power lines can be significant if they are located within an existing flyway, or near areas used by birds for feeding or roosting. Birds often feed in agricultural areas and can collide with overhead transmission lines. A proposed transmission line crossing of the Colorado River was identified as a significant source of collision for birds in the Blythe area.

DATA REQUEST

20. Analyze the potential for bird collisions associated with the proposed project. Graphically illustrate any flyways in the proposed project area and the distance from the proposed project to the Colorado River. Identify any wetlands, surface water bodies/watercourses, nesting areas or rookeries located in the vicinity of the proposed project.

BACKGROUND

The applicant indicated that existing access roads will be used to construct the project. Use of heavy equipment has been proposed. Some sections of access road are wider than others, and it is not apparent that certain sections of access road would be able to accommodate heavy equipment without modification.

DATA REQUEST

21. Provide detailed information on what "certain road improvements" would consist of (Section 3, subsection 3.2.7.2., pg. 3-18). Provide locations and the scope of the work required to accomplish the road improvements. Indicate if work areas would be contained within the existing road ROW. Identify any areas where work would not occur within the existing ROW. Discuss post-construction plans for leveled construction pads. Include plans for restoration.
22. Discuss how biological resource impacts associated with improvements to access roads will be accounted for. Propose mitigation to account for these additional impacts.
23. Describe the types of ROW easements being obtained for the project.

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Data Requests, (99-AFC-8C)

BACKGROUND

Pull, tensioning, and splicing sites will be needed for the project. A more detailed description of impacts associated with these activities is needed.

DATA REQUEST

24. Provide a discussion of what construction activities will be required to utilize areas necessary for pulling, tensioning, and splicing conductors. Include an analysis for site preparation and for acreage impacts. Include proposed post-construction restoration techniques.

BACKGROUND

The applicant proposed BIO-12 to compensate for desert tortoise habitat impacts. It is not apparent to staff how the monetary figures presented in BIO-12 were derived. At an October 6, 2004 meeting, staff discussed the use of a Property Analysis Record (PAR) (or similar analysis) to calculate the amount necessary for habitat acquisition and endowment for management in perpetuity. It is Energy Commission practice for projects with impacts to desert tortoise/habitat to provide funds to the Desert Tortoise Preserve Committee (DTPC) for habitat acquisition and management. It is likely that the DTPC has calculated the cost of habitat acquisition and management in the project area. Staff suggests that Blythe Energy consult DTPC for estimates on acquiring and managing desert tortoise habitat. Once the final impact acreage calculations are completed (based on revised impact calculations), staff's condition will require the protection of acres, with an endowment sufficient to manage the acreage in perpetuity.

DATA REQUEST

25. Submit a revised proposal (using a PAR or similar analysis) for habitat compensation and an appropriate endowment.
26. Define the meaning of "Actual impacts" as used in the sentence on page 5.3-42, BIO-12, second paragraph. Explain how actual impacts differ from permanent and construction impacts as used by Blythe Energy in the Petition for Post Certification Amendment for the BEP. Explain the difference between actual impacts and direct and indirect impacts.

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Data Requests, (99-AFC-8C)

Technical Area: Cultural Resources

Author: Gary Reinoehl

BACKGROUND

The petition for amendment indicated that a record search was conducted at the local California Historical Resources Information System (CHRIS) facility. The CHRIS does not always contain information about resources considered significant by a local jurisdiction under a local ordinance. It cannot be determined from the petition for amendment and Archaeological Inventory report whether local jurisdictions (cities and counties) were contacted to determine if any historical resources in or near the project area are listed in local historical inventories or registers. Historical resources in local inventories can qualify as Historical Resources under CEQA Guidelines Section 15064.5, (a) (2).

DATA REQUEST

27. Please provide a list of historical resources that are listed on city and county inventories or registers specific to this project and that are within 100 feet the transmission line routes and one quarter mile of the substations.
28. If any of these resources could be affected by the project or could have their immediate surroundings altered (change in the integrity of setting) by this project in such a manner that the significance of the historical resource would be materially impaired, then please provide: a copy of the requirements used by the local jurisdictions to qualify for the listing, and a copy of a completed Department of Parks and Recreation (DPR) 523 form for the resource.

BACKGROUND

In some cases, local historical and archaeological societies and museums have knowledge of cultural resources in an area of a project that may not be available through normal record sources. Staff needs the following information to complete the analysis.

DATA REQUEST

29. Please inquire with local historical and archaeological societies and museums that might have knowledge of historical or archaeological resources to obtain information about cultural resources within 100 feet the transmission line routes and one quarter mile of the substations. Please provide copies of the inquiry letters and any responses.
30. If any such resources are identified within 100 feet the transmission line routes and one quarter mile of the substations that could be affected by the project or could have their immediate surroundings altered (change in the integrity of the setting) by this project in such a manner that the significance of the historical resource would be materially impaired, then please provide: a copy of the DPR 523 form recording the resource including a discussion of the significance of the resources under CEQA Section 15064.5(a), (3), (A)(B)(C) and (D) and the

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National Register of Historic Places and provide staff with a copy of the assessment and the specialist's conclusions regarding the significance.

BACKGROUND

The petition for amendment indicates that not all of the proposed alternatives have been surveyed for cultural resources. The search of existing recorded resources provided valuable information from previous surveys to determine the sensitivity of the project areas and possible impacts to various cultural resources. The record search did not appear to consult General Land Office (GLO) maps. Western Area Power Administration (Western) needs specific information to provide their assessment of the impacts of the proposed project under federal regulations.

DATA REQUEST

31. Please review the GLO maps for all alternatives and provide a review of the information relevant to cultural resource provided by the GLO maps within a half-mile (1/2-mile) radius of the proposed facilities.
32. Please submit the current (within last five years) technical reports documenting the cultural resource surveys within 100 feet of the proposed facilities.
33. If there is no current survey, please provide a schedule for all additional cultural resource surveys, the areas proposed to be surveyed for the preferred alternatives for the project, and a schedule for the completion of the report(s).
34. If additional resources are found and it is not possible to avoid the cultural resource(s), please provide a schedule for the evaluation of the eligibility of the resource(s) for the California Register of Historical Resources (CEQA Section 15064.5, (a), (3), (A), (B), (C), and (D) and the National Register of Historic Places and the completion of the report(s).

BACKGROUND

The petition for amendment provides a list of identified resources and the potential eligibility for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) (Table 6.16-5). For those resources recommended as important, treatment recommendations are also provided. Treatment may vary by the criteria for which a resource is eligible for the NRHP and the CRHR.

DATA REQUEST

35. Please provide the NRHP criteria (A, B, C or D) and the CRHR criteria (1, 2, 3, or 4) for which each of the resources is potentially eligible.
36. When "Additional Documentation" is recommended, please indicate what level or kind of documentation (data recovery, photo documentation, mapping, etc.) is being recommended to reduce the impact to less than significant.

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Data Requests, (99-AFC-8C)

BACKGROUND

Blythe Energy Project I (BEP I) provided an archeological survey report as part of the amendment process. Some of the resources previously recorded included buildings and structures, such as the aqueduct pumping station.

DATA REQUEST

37. If buildings and structures are within 100 feet of the transmission line and within one quarter mile of the substations and substation expansion that have not been evaluated for their eligibility to the NRHP or the CRHR, please provide a technical report documenting those buildings and structures including completed DPR 523 forms of those resources by an individual that meets the Secretary of Interior Professional Standards for history or architectural history.
38. If resource(s) exist within 100 feet of the transmission line and within one quarter mile of the substations and substation expansion and it appears that the resource(s) can be avoided, please indicate the measures that will be implemented to assure that the cultural resource(s) will not be impacted.
39. If it is not possible to avoid the cultural resource(s), please provide an evaluation of the eligibility of the site(s) for the CRHR (CEQA Section 15064.5, (a), (3), (A), (B), (C), and (D) and the NRHP.

BACKGROUND

The petition for amendment provides a section that discusses the archeology and archeological sensitivity of the proposed transmission line area. A map, Figure 5.16-1, provides a visual orientation of the relationship of the transmission line with the National Park Service (NPS) Boundaries and Bureau of Land Management (BLM) Areas of Critical Concern (ACEC). During one of the public meetings of the BEP I siting case, an individual provided information about the Bird Song Trail and the sensitivity of the Palo Verde Mesa. Western needs for following information to complete their NEPA process.

DATA REQUEST

40. Please provide a new map, similar to Figure 5.16-1, that includes the Palo Verde Mesa as a sensitive area and a discussion (for section 5.16.1.2) of the sensitivity of the Palo Verde Mesa because of the Bird Song Trail.

BACKGROUND

The petition for amendment provides an ethnographic background for the project area. As part of the BEP I project, Western contacted a number of tribes and Native American individuals as part of their government to government requirements and an ethnographic study was completed for the BEP I plant site.

DATA REQUEST

41. Please provide a list of tribes that were previously contacted by Western as part of the BEP I project and a brief summary of the ethnographic report.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

BACKGROUND

In section 5.16.1.3, Historic Background, the petition for amendment provides a good discussion of various time periods and developmental themes. Cultural resources that have been recorded and determined significant under a local ordinance, a state list, or a Federal list need to be mentioned in these sections.

DATA REQUEST

42. Please add a discussion of State Landmark 992 and any other cultural resources that are on formal lists to the appropriate developmental theme in the Historic Background section.

BACKGROUND

The petition for amendment describes a variety of survey methods (“windshield review”, small area judgmental surveys and focused surveys) that were utilized to identify resources and the results of the survey effort. Windshield surveys are most frequently used for standing structures and buildings. There was no description of how each of the different types of surveys was selected for the different areas (e.g. topography, drainages, and/or other resources). Western needs the following information for their NEPA process.

DATA REQUEST

43. Please provide a discussion of the criteria used for selecting areas of each survey methodology and the number of resources identified using each of the methods.

BACKGROUND

The section on survey methods indicates that additional surveys will be completed within 30 day prior to ground disturbance in accordance with Cul-14 of the Energy Commissions Conditions of Certification for the BEP I permit (Order Approving Amendment To Add 66-Acre Area for Deposit of Excess Sediments, Order No. 02-0814-01(e)). The summary of Cul-14 does not indicate that evaluations in the form or technical reports of resources that can not be avoided are also required. The exact procedure and process time limits have not yet been developed for the Federal requirements.

DATA REQUEST

44. Please provide a summary of the Federal process that would be followed for this aspect of the project and proposed time limits for each aspect of the reporting process (survey report, evaluation report, treatment plan/mitigation measures).

BACKGROUND

The Operations and Maintenance Phase Impacts section of the petition for amendment indicates that there would be no anticipated disturbance outside of the initial construction impact area. The petition does not provide a process that would be

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

followed (monitoring, surveys, evaluations, etc.) if additional disturbance outside of the initial construction impact areas was required under the Energy Commission requirements or the Federal requirements.

DATA REQUEST

45. Please provide a discussion or the process that would be followed if additional ground disturbance would be required outside of the initial construction impact areas and the method for assuring that this is adequate.

BACKGROUND

Section 5.8.2.2 of the petition for amendment indicates that “helicopters may also be used for stringing cable between transmission line poles.” Helicopters would be used when this would lower impacts to vegetation and soils. The applicant indicated to Energy Commission cultural resources staff that helicopters would be the major vehicle used for stringing cable to reduce the possible impacts to cultural resources.

DATA REQUEST

46. Please indicate when and where helicopters would be used for stringing cable and if monitoring or other inspections would be completed where the stringing of cables would disturb the ground.

BACKGROUND

In Section 5.16.3.1 of the petition for amendment the criteria for eligibility for the CRHR is provided. This section also indicates that the criteria for the NRHP are the same as for the CRHR. The information provided in the petition for amendment is the basis for the Energy Commission staff assessment and the NEPA document for the Federal approval, the full criteria for the NRHP need to be in this section. There should also be a discussion of the Federal regulations that would be followed for this aspect of the project.

DATA REQUEST

47. Please provide the criteria for the NRHP and a discussion of the Federal regulations that would be followed for this aspect of the project.

BACKGROUND

Section 5.16.3.2 of the petition for amendment indicates that the implementation of the conditions of certification would ensure that direct, indirect or cumulative impacts would be reduced or eliminated and would not be adverse (significant). The identification of all cultural resources that could be impacted by the project has not been completed. Consideration of indirect impacts by the establishment of additional construction roads was not provided. Various types of resources require different types of mitigation to reduce the impact to less than significant or not adverse.

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Data Requests, (99-AFC-8C)

DATA REQUEST

48. Please provide a discussion of mitigation measures that would be used for Traditional Cultural Properties, buildings and structures, and archeological sites that would reduce the impacts to less than significant.
49. Please provide a discussion of the methods that would be used to minimize impacts from Off Highway Vehicles once construction has been completed.
50. Please provide a discussion of cumulative impacts to cultural resources from other reasonable foreseeable projects in this area such as other transmission lines.

BACKGROUND

Section 5.17 of the petition for amendment indicated that a cultural resources survey had been conducted at each of the pole locations and that no cultural resources were observed that would be impacted by construction or operation of the poles.

DATA REQUEST

51. Please provide a technical report by an individual that meets the Secretary of Interior's Professional Standards documenting the cultural resource survey of the pole locations, laydown and construction areas, and new access roads.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Geology and Paleontology

Author: Patrick A. Pilling, Ph.D., P.E., G.E.

BACKGROUND

The geology along the proposed linear improvements is critical in assessing the potential for geologic hazards to impact the site. In particular, a geologic map provides a visual overview of materials present in the area, as well as faulting.

DATA REQUEST

52. Please provide a geologic map of the proposed transmission line alignment at a reasonable scale that includes a description of all recognized stratigraphic units, major geologic structures (faults), and geomorphic features within 2 miles of the linear alignment.

BACKGROUND

Figure 5.5-1 indicates the proposed transmission line will cross geologic resources. When improvements will cross over known resources, mitigation of such impacts must be addressed. The text of the application (Section 5.5.1.2) states that there are no active mines or mineral producers near the transmission line. Potential mineral sources, however, must also be addressed.

DATA REQUEST

53. Please provide a discussion of the type of mineral resources to be crossed by the transmission line and how the impact to such potential resources will be mitigated.

BACKGROUND

The application does not adequately address geologic hazards related to tsunamis and seiches, dynamic compaction (seismically and machine vibration induced), hydrocompaction, and expansive soils.

DATA REQUEST

54. Please provide a complete discussion of geologic hazards, in particular those listed above.

BACKGROUND

The application in Section 5.5.1.3 provides a general discussion of faults in the area; however, more specific information is required to allow the analysis of ground shaking at the site.

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Data Requests, (99-AFC-8C)

DATA REQUEST

55. Please provide a table that lists each significant Quaternary fault, the type of fault, the maximum moment magnitude, rupture length, slip rate, and shortest distance from the fault to the site.

BACKGROUND

Section 5.5.1.5 states that seismically induced landslide risk is present for a portion of the transmission line near the north end of the Chuckwalla Mountains, as well as near the edge of the Eagle Mountains, Landslides in and around transmission line foundations can disrupt proper functioning of the lines.

DATA REQUEST

56. Please provide a more detailed discussion of the landslide risk, in particular the type of slides that could be anticipated, the types of materials present in the suspect areas, the potential failure mechanism, and how such events will be mitigated.

BACKGROUND

The geologic units present at a site allow for the determination of a unit's sensitivity with respect to potentially hosting paleontological resources. In particular, geologic units are assigned a sensitivity rating with respect to paleontological resources. Such an assessment allows for the evaluation of the sites with respect to potential impacts.

DATA REQUEST

57. Please provide a sensitivity assessment for the geologic units present along the transmission line alignment.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Land Use

Author: Amanda Stennick

BACKGROUND

Section 5.6.2.2 of the Blythe Transmission Line Modification (99-AFC-8C), states that “The modification of the Julian Hinds Substation and the installation of transmission poles on county lands may require a conditional use permit from Riverside County.”

DATA REQUEST

58. Please provide confirmation from Riverside County on whether the project will require a conditional use permit. If the project will require a conditional use permit, please submit the conditions that Riverside County would require for the modification of the Julian Hinds Substation and the installation of transmission poles, if it was the permitting agency for the project.

BACKGROUND

Figure 5.6-1 shows land ownership within the proposed transmission line but doesn't show zoning or general plan designations for the areas of the transmission line within Riverside County and the City of Blythe.

DATA REQUEST

59. Using a map similar to Figure 5.6-1, please provide zoning classifications and general plan designation for those lands within the transmission line corridor in Riverside County and the City of Blythe.

BACKGROUND

Section 5.6.2.3 of the Blythe Transmission Line Modification (99-AFC-8) states that “The proposed transmission line would require a height variance [from the City of Blythe] if the [pole] height limitations [95 feet or 145 feet if double circuited] are exceeded.”

DATA REQUEST

60. Please provide confirmation from the City of Blythe whether the project will require a variance for exceeding the height limitation. If the project will require a variance, please submit a timeline as to when the City plans to review the request for said variance.

BACKGROUND

Sections 5.6.1.4.2 and 5.6.2.2 of the Blythe Transmission Line Modification (99-AFC-8) reference policies, standards, and objectives imposed by the Riverside County General Plan, but these are not specifically identified.

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Data Requests, (99-AFC-8C)

DATA REQUEST

61. Please provide a copy of the land use policies, objectives, and standards related to the siting of transmission lines in the Public Services Element of the Riverside County General Plan.

BACKGROUND

Section 5.6.1.4.2 of the Blythe Transmission Line Modification (99-AFC-8) discusses the proposed transmission line modification in relation to the Desert Center Area Plan but does not include the policies, standards, and objectives in the Desert Center Area Plan.

DATA REQUEST

62. Please provide a copy of the Desert Center Area Plan as contained in the Riverside County General Plan.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Socioeconomics

Author: Joseph Diamond Ph. D.

BACKGROUND

More data/information is needed for staff to understand labor force construction activity in order to determine the direct and cumulative impacts for the Blythe 1 Transmission Lines Project.

DATA REQUEST

63. Please provide:
- a. The estimated starting and ending dates for the project.
 - b. the monthly construction labor force for the 12 month construction period.

BACKGROUND

Staff's estimate of potential direct fiscal/economic impacts of the Blythe 1 Transmission Lines Project requires the following additional data/information.

DATA REQUEST

64. Please provide (indicating the year of the estimate in dollars):
- a. construction payroll
 - b. value of purchased construction and operation equipment and materials
 - c. construction and operation sales tax
 - d. estimated annual property tax and the expected life (in years) of the project
 - e. the year of the dollars for the cost of the Blythe 1 Transmission Lines Project estimated at \$50 million

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Soils and Water Resources

Author: Richard Sapudar

BACKGROUND

Construction and operation of the Blythe Energy Project Transmission Line may induce water and wind erosion at the substation sites and along its linear facilities.

A draft Drainage, Erosion and Sediment Control Plan (DESCP) is needed to evaluate construction activities at the substation sites and all facilities associated with the transmission line project components. The plan is necessary to provide adequate detail regarding the projects construction and operation and to adequately address the applicant's responsibility to provide a complete project description that identifies all potential impacts and provides for adequate mitigation in a manner fully consistent with the data requirements of CEC's siting regulations (Title 20. section 1769)

The purpose of the draft plan is to provide staff with a document of sufficient detail that clearly identifies all potential impacts and mitigation measures, ensures only the minimum area necessary is disturbed, protects disturbed and sensitive areas, retains and controls sediment on-site, minimizes off-site effects of water and wind erosion. The project must comply with all applicable LORS and incorporate all related requirements of other responsible agencies, to include Western Area Power Administration (Western), the Bureau of Land Management (BLM), the State Water Resources Control Board/Regional Water Quality Control Board (SWRCB/RWQCB), etc.

Additionally, the draft DESCP should specifically address all issues raised by Western in their data requests dated October 2004, particularly Western Data Request numbers 1, 2, 5, 6, 7, 10, 12, 13, 43, 44, 53, 54, 56, 57, 59, 60, 61, 62, 65, 66, and 72.

DATA REQUEST

65. Please provide a date for, or provide a draft Drainage Erosion and Sedimentation Control Plan (DESCP) that identifies all measures that will be implemented at various locations of the project during construction and operation of the proposed transmission line(s). The plan must address the substations, construction laydown areas; pull areas, temporary and/or permanent access roads, rights of way, and any other construction staging areas and all other ancillary facilities. If the draft DESCP is not provided with your responses, please provide a schedule when it will be completed.
 - a. The DESCP must identify all permanent and temporary BMPs in written form and depicted on a construction drawing(s) of appropriate scale to clearly identify those BMPs employed to control water drainage and wind related erosion and offsite sedimentation during construction and operation.
 - b. Any measures necessary to address federal or regional permits (i.e., Nationwide Permits, Streambed Alteration Agreements, or 401 Certification, BLM, Western, etc.) should be identified and included in the DESCP where appropriate.

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- c. The plan must also identify maintenance and monitoring efforts, including a schedule for all erosion control measures.
- d. The plan must include and be consistent with any biological resources-related Erosion Control and Revegetation Plan particularly where required by a Biological Resource Mitigation Implementation and Monitoring Plan and any proposed Grading Plan from responsible agencies, to include Western and BLM.
- e. Please provide representative profiles and cross sections of areas that will be cut and filled, in relation to the proposed conceptual location of BMPs for erosion control during construction.
- f. Please provide a discussion of all assumptions, calculations, measures, and any other data or information that demonstrates the proposed DESCP will conform to all federal, State, and local regulatory requirements.
- g. The site specific DESCP for both construction and operation phases must include the following elements, as applicable:
 - (1) ***Vicinity Map*** – A map shall be provided indicating the location of all project elements with depiction of significant geographic features to include watercourses, creeks, other drainages, wetlands, and sensitive habitat.
 - (2) ***Site Delineation*** – The project site and all project elements shall be delineated showing boundary lines of all construction areas and the location of existing and proposed structures, linear facilities, roads, and drainage facilities.
 - (3) ***Watercourses and Critical Areas*** – The DESCP shall show the location of ***watercourses*** and critical areas such as creeks, rivers, wetlands and other environmentally sensitive areas. Indicate the proximity of those features to the project transmission line construction corridor and ancillary construction or operational support areas.
 - (4) ***Drainage*** – The DESCP shall provide a topographic site map showing existing, interim and proposed drainage systems; drainage area boundaries and water shed sizes in acres; the hydraulic analysis to support the selection of Best Management Practices (BMPs) to divert off-site drainage around or through the transmission line corridor, laydown areas, and other construction areas. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off-site for a minimum distance of 100 feet in flat terrain.
 - (5) ***Clearing and Grading*** – The plan shall provide a delineation of areas to be cleared of ***vegetation*** and areas to be preserved. The plan shall provide elevations, slope, location, and extent of all proposed gradings as shown by contours, cross sections or other means. The locations of any disposal areas, fills, or other special features will also be shown. Illustrate existing and proposed topography tying in proposed contours

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with existing topography. The DESCP shall include a statement of the quantities of material excavated or filled for each element of the project (site and pipeline corridors), whether such excavations or fill is temporary or permanent, and the amount of such material to be imported or exported.

- (6) **Project Schedule** – The DESCP shall identify on the topographic site map the location of the site specific BMPs to be employed during each phase of **construction** (initial grading, project element excavation and construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each project element for each phase of construction.
- (7) **Best Management Practices** – The DESCP shall show the location, timing, inspection, and maintenance schedule of all erosion and sediment control **BMPs** to be used prior to initial grading, during project element excavation and construction, and final grading/stabilization. BMPs shall include measures designed to control dust and stabilize construction access roads and entrances.
- (8) **Erosion Control Drawings** -- The erosion control drawings and narrative must be designed and sealed by a professional engineer/erosion control specialist.
- (9) **Design Storm** -- Please discuss the design storm that will be used to **calculate** additional capacity required in any contained areas surrounding outside chemical storage areas.
- (10) **Groundwater** -- During construction, it is unlikely, but possible that **groundwater** will be encountered. Discuss dewatering activities/techniques that may be needed, including disposal of associated water.
- (11) **Contaminated Soil or Groundwater** -- Address how any **contaminated** soil or groundwater that may be excavated or encountered during construction will be collected, treated, and discharged.
- (12) **Water Quality of Wastewater** -- Discuss the anticipated water quality of wastewater discharged, anticipated disposal of waste stream(s), and any appropriate BMPs necessary to ensure no discharge of contaminants to surface or groundwater will result from hydrostatic testing or other activities.

BACKGROUND

Construction Stormwater Pollution Prevention Plan (SWPPP) Requirement

The following is an excerpt from the State Water Resources Control Board website (<http://www.swrcb.ca.gov/stormwtr/construction.html>):

Dischargers whose projects disturb 1 or more acres of soil or whose projects disturb less than 1 acre but are part of a larger common plan of

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development that in total disturbs 1 or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP should contain a site map(s) which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP.

If a single project traverses more than one Regional Water Quality Control Board (RWQCB) jurisdiction, a complete Notice of Intent package (Notice of Intent, site map, and fee) and Notice of Termination (upon completion of each section), must be filed for each RWQCB.

See the SWRCB [Linear Construction Frequently Asked Questions](http://www.swrcb.ca.gov/stormwtr/linearfaq.html) (<http://www.swrcb.ca.gov/stormwtr/linearfaq.html>) for additional information.

DATA REQUEST

66. Submit the following items for the construction phase of the project:
- a. A copy of the Notice of Intent (NOI) and site map submitted to the State Water Resources Control Board (SWRCB).
 - b. Verification of receipt of the Waste Discharger Identification number (WDID) from the SWRCB.

BACKGROUND

The AFC summarizes the water supply needed for the transmission line, Buck Substation, and Julian Hinds Substation construction. However, the information provided for the source of the water and conveyance facilities is inadequate. It is necessary for staff to understand the source of the water and how it will be conveyed to the place of use to evaluate any impacts or LORS issues associated with this aspect of the project.

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DATA REQUEST

67. Provide a map of adequate detail and a discussion of where and from what entity all water for the various phases (reaches, segments, etc.) of the project will be obtained, and the amounts to be used from each source.
68. Provide a discussion of how the water from each source will be conveyed to the place of use, i.e., pipelines, trucks, etc., and include any necessary practices and/or BMPs for this activity in the draft DESCP.
69. If a will serve letter is required from the sources providing water, please include any conditions or limitations on the water to be provided.

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Technical Area: Traffic and Transportation

Author: David Flores

BACKGROUND

AFC p.5.10-8 states that the Blythe Airport is approximately 1.2 miles to the west of the Buck Substation. The Blythe Airport is owned by the County of Riverside, but maintained and operated by the City of Blythe. The Airport is a general aviation facility that services the eastern portion of Riverside County. The airport maintains a 6,562-foot and a 5,820-foot runway that allows it to handle general aviation and business/corporate jets. The airport has been approved by the Federal Aviation Administration (FAA) for instrument approach landings, and therefore requires a substantial clearance area above tall structures, including transmission line towers.

DATA REQUEST

70. Staff requests that the applicant provide the following items: a copy of the FAA's written determination on the applicant's filing of an FAA Form 7460 - "Notice of Proposed Construction or Alteration" for the project.
71. Provide a copy of the application to the Riverside County Airport Land Use Commission (ALUC) which will make a determination that the project is consistent with the Comprehensive Land Use Plan for the Blythe Airport.
72. Provide a copy of the current FAA approved "Approach and Clear Zone Plan" for the Blythe Airport, with the exact location of the proposed transmission towers clearly marked.

Blythe Energy Transmission Line Amendment
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Technical Area: Transmission System Engineering

Authors: Ajoy Guha, P. E. and Al McCuen

BACKGROUND

Staff needs a complete System Impact Study to analyze the reliability impacts, and to be confident of flowability and adequacy of the proposed new transmission line modifications and any other new/or modified downstream facilities necessary to support delivery of 520 MW generation output of the Blythe Energy Project (BEP) to the California Independent System Operator (Cal-ISO) controlled grid. Such transmission modifications should comply with the Utility Reliability & Planning Criteria, North American Electric Reliability Council (NERC) Planning Standards, NERC/Western Electric Coordinating Council (WECC) Planning Standards, Cal-ISO Planning Standards and Western Area Power Administration (Western) Planning Standard and must be fully coordinated with the Cal-ISO.

After reviewing the Petition for the BEP Transmission line modifications and the System Impact Study (SIS) reports dated July 19 & September 15, 2004 by Southern California Edison Company (SCE), staff observes the following:

1. In section 2.2 (page 2-3) the applicant states that the modifications will be placed in service in mid-2007, whereas SCE's SIS report (Page i) reveals that SCE could permit and construct the proposed modifications in the later part of 2008. Staff believes that the timing by SCE is more realistic, if not optimistic.
2. The SIS for Buck Blvd.-Julian Hinds line component:
 - a. The study was conducted with a 2008 summer peak case (for maximum loading on 230 kV lines) with the SCE proposed Palo Verde-Devers #2 (PVD2 or Harquahala-Devers) 500 kV line and without Metropolitan Water District (MWD) pump load. A sensitivity study was performed without the PVD2 line. But at this stage it is very uncertain when the permit for the PVD2 line will be issued and when the line will be placed in service.
 - b. In the post project base case, a new overload criteria violation was observed in the Julian Hinds-Mirage 230 kV line under normal (N-0) conditions with full 520 MW generation output from BEP (Table 1, Page 2). The identified normal overloads need to be mitigated in the post-project case. It appears that the power flow contingency studies for N-1 & N-2 conditions were performed with the post-project base case which includes the above N-0 overload
 - c. The SIS was not performed with a 2008 Light Autumn or any other off-peak case.
 - d. It is not clear from the study report if any facilities of the Imperial Irrigation District (IID) between Devers and Coachella area would be overloaded or not and how the Path 42 rating or flow would be affected.
 - e. For downstream overload criteria violations, mitigation measures were considered but not selected.
 - f. The delivery point of interconnection with the Cal-ISO grid has not been identified for this line segment.

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3. The SIS for Buck Blvd. to Palo Verde-Devers 500 kV line component:
 - a. The study was conducted with a 2007 light autumn case, which does not include the proposed PVD2 line, but does include full MWD pump load. The sensitivity study with the 2007 case includes the proposed PVD2 line and full MWD pump load. However, the study with a 2008 light autumn case includes the PVD2 line and full MWD pump load. To be consistent, this should be the sensitivity case, whereas the base case should not have the proposed PVD2 line modeled. The sensitivity study with the 2008 light autumn case was done with the proposed new Buck Blvd.-Julian Hinds 230 kV line component and without the proposed PVD2 line. As stated earlier, it is very uncertain at this stage when the PVD2 line will be completed.
 - b. The study was not performed with a summer peak case and under double (N-2) contingency conditions.
 - c. For downstream overload criteria violations, mitigation measures were considered, but not selected.
 - d. The delivery point of interconnection with the Cal-ISO grid has not been identified for this line segment.
 - e. For the Palo Verde-Devers 500 kV line if the series compensation exceeds 50 percent, a Subsynchronous Resonance (SSR) analysis will be required (Section A, Page 6).
 - f. In Section A.2.1 (Page 16), it is stated that with the Midpoint 500-230-161 kV phase-shift transformer (PST) at a zero angle additional facility upgrades are required. It is also stated that to maintain the proposed Midpoint 500-230-161 kV phase-shift transformer rating of 625 MVA, the phase-shift transformer will need a feed-back loop that maintains a static flow between the Midpoint 500 kV and Midpoint 161 kV buses.
4. In Section 1.2 (Page 1-3) it is indicated that the WECC path rating process, which may take about a 12-18 month timeframe, must be completed before it will be known if one or both of the transmission modifications will be required to be implemented in order to provide adequate transmission capacity from BEP to the Cal-ISO grid.
5. The applicant anticipates that as a "Project Sponsor" BEP will fund the entire cost of construction of the transmission modification and their cost of operation (Section 1.2, Page 1-1).

DATA REQUESTS

73. Buck Blvd.-Julian Hinds 230 kV line Component:
Provide an amended SIS report prepared by SCE and coordinated with the Cal-ISO, Western and the Energy Commission. Analyze the system as follows with and without the proposed line, include all system impacts and mitigation alternatives considered for a 2008 Light autumn and summer peak conditions without the PVD2 line, MWD loads may be modeled between zero and full load for worst line loading condition or as necessary:

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- a. The post-project base cases should be prepared without any new overload in the Julian Hinds-Mirage 230 kV line (and other lines if necessary) under N-0 conditions (i. e., by adjusting the angle of the 230/161 kV PST at Buck Blvd. Substation and/or reducing the BEP generation from its 520 MW full capacity).
- b. Analyze the system for power flows with the base cases as stated above in Item 1 under single (N-1) and double (N-2) contingency conditions and provide the results in the summary tables in the main report listing new overload criteria violations and all incremental overloads in the post-project scenarios. Please include normal and emergency ratings of the overloaded lines in the tables. Demonstrate that with the proposed mitigation(s), all the identified normal and contingency overloads are mitigated.
- c. Sensitivity analyses may be performed individually with the PVD2 line (optional) or full MWD pump loads with modified base cases as mentioned above in Item 1.a.
- d. Amended results should be incorporated in Table 5 with normal and emergency ratings of the respective transmission lines, pre and post-project loadings under all scenarios being studied.
- e. List the planning reliability criteria and planning assumptions utilized in the load flow study including major path flows (SCIT, EOR, WOR, PVD1 flow, PVD2 flow, Path 42, Path 59 and any other relevant path), major generation in SCE area including proposed queue generation and Cal-ISO approved updated annual transmission plans in SCE area.
- f. Provide power flow diagrams (MVA, percent loading and PU voltage) for all base cases with and without the project including sensitivity cases. Power flow diagrams must also be submitted for all the N-1 & N-2 studies where overload or voltage criteria violations appear. Please include all other relevant lines (230 kV lines “west of Devers” and 115 kV lines off Mirage substation) in the diagram.
- g. Provide list of all contingencies (N-1, N-2) for each study (load flow, post-transient power flow and transient stability study).
- h. Provide post-transient power flow results in a table for 500 kV and other contingencies with pre and post-project voltages and their differences under N-1 and N-2 contingencies. Provide copies of all stability plots (with proper scales) with switching files.
- i. Provide electronic updated copies of the PSLF *.sav and *.drw files of all base cases including sensitivity cases with and without the project, and EPCL and/or AUTOCON contingency and comparison files. Provide electronic copies of the PSLF *.dyd and *.swt files and stability plots for all fault simulations.
- j. Identify the Delivery point of interconnection (metering point) with the Cal-ISO grid associated with this proposed transmission project.
- k. Analyze and report how much the IID transmission facilities between Devers and the Coachella area could be affected by the BEP transmission modification project under normal and contingency conditions. Analyze how power flows in Path 42 and Path 59 could be affected.

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- l. Provide a Facilities study report performed by SCE (with all breaker ratings in the table for short circuit study analysis) and identify selected mitigation measure(s) for each reliability criteria violation. The selected mitigation must be endorsed by the applicant, Cal-ISO and the respective utility (SCE, Western, IID, MWD) with their approval letter.
 - m. Submit the SIS performed by Western for the transmission modification and the corresponding Facilities study report (if any).
 - n. Explain the advantages and disadvantages of installing a 230/161 kV phase shifting transformer at Western's Buck Blvd. substation from load flow and operational points of view on a short and long term basis and the feasibility of Auto operation.
 - o. Include cost comparisons for all the considered alternatives.
74. Buck Blvd. to Palo Verde-Devers 500 kV line component:
Provide an amended SIS report prepared by SCE coordinated with the Cal-ISO, Western and the Energy Commission. Analyze the system as follows with and without the proposed transmission modification, include all system impacts and mitigation alternatives considered for a 2008 Light autumn and summer peak conditions without the PVD2 line, MWD loads may be modeled between zero and full load for worst line loading condition or as necessary:
- a. There should be no normal overloads for the post-project case with the proposed transmission line modifications. Specifically, the post-project base cases should be developed without any new overload in the Devers-Midpoint 500 kV line (Table 4, Page 16) and in other lines if necessary under N-0 conditions (i. e., by adjusting the angle of the respective PST and/or reducing the BEP generation from its 520 MW full capacity).
 - b. Analyze the system for power flows with the base case as stated above in Item 2.a under single (N-1) and double (N-2) contingency conditions and provide the results in the summary tables in the main report listing new overload criteria violations and all incremental overloads in the post-project scenarios. Please include normal and emergency ratings of the overloaded lines in the tables.
 - c. A sensitivity analyses may be performed individually with the PVD2 line (optional) or with the Buck Blvd.-Julian Hinds 230 kV line or with different MWD pump loads with the modified base cases as mentioned above in Item 2.a.
 - d. In the planning assumptions for the load flow study (refer to Tables 1, 2 & 3, Pages 11-12) include Path 42, Path 59 or any other relevant path flows, major generation in SCE area including proposed queue generation and Cal-ISO approved updated annual transmission plans in SCE area.
 - e. Provide power flow diagrams (MVA, percent loading and PU voltage) for all base cases with and without the project including sensitivity cases for SCE 500 kV system (same as provided in Appendix A) and for 230, 161 & 115 kV systems (as requested in Item 1.f above). Power flow diagrams must also be submitted for all the N-1 & N-2 studies where overload or voltage criteria violations appear.

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- f. Identify the delivery point of interconnection (metering point) with the Cal-ISO grid associated with the proposed transmission project.
 - g. Provide a list of all N-2 contingencies for the load flow study. Provide a list of N-1 and N-2 contingencies for the transient stability study.
 - h. Provide post-transient power flow results in a table for 500 kV and other contingencies with pre and post-project voltages and their differences under N-1 and N-2 contingencies.
 - i. Provide electronic updated copies of the PSLF *.sav and *.drw files of all base cases including sensitivity cases with and without the project, and EPCL and/or AUTOCON contingency and comparison files. Provide electronic copies of the PSLF *.dyd and *.swt files and stability plots for all fault simulations.
 - j. Analyze and report how much the IID transmission facilities between Devers and the Coachella area could be affected by the BEP transmission modification project(s) under normal and contingency conditions. And also analyze how power flows in Path 42 and Path 59 could be affected.
 - k. Provide a Facilities Study Report performed by SCE (Provide all breaker ratings in the table for short circuit study analysis) and identify selected mitigation measure(s) for each reliability criteria violation. The selected mitigation must be endorsed by the applicant, Cal-ISO and the respective utility (SCE, Western, IID, MWD) with their approval letter.
 - l. Submit the SIS performed by Western for the transmission modification and the corresponding Facilities study report if any.
 - m. Explain the advantages and disadvantages of installing the Midpoint 500-230-161 kV Phase shifting transformer (PST) and operating it at a zero angle from a load flow and operational point of view on a short and long term basis. Indicate the feasibility of procuring such PST as a single unit and the feasibility of Auto operation.
 - n. Explain the advantages and disadvantages of additional series compensation, or installing a 500 kV PST in the Devers-Midpoint 500 kV line from a load flow and operational point of view and its feasibility of Auto operation.
 - o. Include cost comparisons for all the alternatives considered.
75. The applicant anticipates that as a "Project Sponsor" BEP will fund the entire cost of construction of the transmission modifications and their cost of operation (Section 1.2, Page 1-1). Please explain any rate payer impacts and whether there are any costs that will be incurred by SCE or Western in the short and long run.
76. Upon completion of the Facilities Studies by SCE and Western (if any) the adequacy and additional transmission delivery capability of each transmission modification separately and jointly would be more revealed and clearer. In order to expedite the project, staff would prefer that the WECC path rating process be initiated after completion of the Facilities studies and their review by all

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concerned utilities. Please provide a schedule showing critical path elements required to secure the WECC path analyses.

77. Staff anticipates that upon completion of the amended SIS reports by SCE and the SIS report by Western, and all identified planning criteria violations are shown mitigated, the Cal-ISO will then be in a position to issue their contingent “preliminary approval” letter pending “final approval” letter issue at a later stage. Please provide a schedule depicting critical path elements necessary to secure preliminary Cal-ISO approval of interconnections at Julian Hinds and at the DPV1.
78. On page 5.3-47 the applicant indicates that there are four proposed lines that potentially would be adjacent to each other for a large portion of the route between the proposed Midpoint Substation and near Julian Hinds. There are generally significant reliability concerns for a common mode outage when close spacing of major transmission lines is proposed. Line spacing of 1000 feet or more have been discussed in the industry to minimize a common mode outage. Please discuss the feasibility of such close line spacing.
79. Please provide your schedule for sub-synchronous resonance (SSR) analysis report if the option for exceeding 50 percent series compensation in the Palo Verde-Devers 500 kV line is chosen in any transmission modification plan.

Technical Area: Visual Resources

Author: Eric Knight

BACKGROUND

The proposed transmission line from the Buck to Julian Hinds substations would generally parallel the existing SCE D-PV1 500-kV line. Two other transmission lines have been proposed for the same general corridor: SCE's D-PV2 500-kV line and IID's Desert Southwest Transmission Line Project 500-kV line. In regard to cumulative impacts, the petition concludes: "If these transmission lines were constructed they would occur within a designated utility corridor where visual impacts are expected to occur, thus lessening visual clutter and utility line sprawl in other portions of the desert" (Visual Resources section, page 5.9-17). However, the petition avoids answering the question as to whether the visual impacts of the proposed transmission line would combine together with the impacts of the existing and probable future transmission lines to produce significant cumulative visual impacts.

DATA REQUEST

80. For each Key Observation Point, please discuss the cumulative visual impacts of the proposed transmission line and the existing and probable future transmission lines and whether visual impacts would be significant. Please fully explain the rationale for the conclusions made. The discussion should include consideration of the fact that Riverside County has designated Interstate 10 as a County Scenic Highway.
81. Using one of the simulations in the petition as a base image, please provide a new simulation (11"x17" format) that includes the two probable future transmission lines in the view. The KOP that presents a worst case scenario should be selected. This may be KOP 4 based on the Interim VRM Class 2 assigned (by the applicant) to this view (due primarily to Alligator Rock being within the foreground of the view).

BACKGROUND

The discussion of LORS conformance states that the project would be built, constructed, and operated in accordance with all LORS contained in Appendix A of the Commission Decision. Appendix A lists the relevant planning documents (e.g., general plans) but does not list specific policies.

DATA REQUEST

82. Please identify the specific visual resources related policies applicable to the proposed project, such as those addressing scenic corridors in the Riverside County General Plan.
83. Please discuss whether the project would be consistent with all applicable visual resources related LORS. Please clearly explain the basis for the determination.

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BACKGROUND

Under Proposed Mitigation Measures, the petition identifies Condition of Certification VIS-1 which specifies that the electric transmission towers shall have a non-reflective finish.

DATA REQUEST

84. In addition to the proposed transmission line poles having a non-reflective finish, please discuss whether the conductors would be non-specular (i.e., conductors that have a low level of reflectivity) and the insulators would be non-reflective and non-refractive to reduce their visibility.

BACKGROUND

During the tour of the transmission line route on October 19th, visual resources staff was struck by how difficult it was to detect, while driving along I-10, lattice steel transmission towers such as those used for SCE's DPV-1 line, particularly the lattice towers with a backdrop of mountains. Figure 5.9-4a (KOP 3) in the petition illustrates an example of this – beginning just left of the mountain range and then continuing to the right, there are three lattice towers of SCE's DPV-1 line faintly detectable in the view. The reviewer for the Western Area Power Administration (WAPA) had the same observation and is of the opinion that lattice steel towers would be much less visually intrusive than the proposed concrete single-pole structures. Energy Commission staff shares this view, although at highway crossings where the structures are very close to the highway, staff believes that the proposed single pole structures would be better because the poles would occupy less of an observer's field of view than lattice towers. In the BLM's Visual Resources Management (VRM) System, modifications in areas designated as VRM Class 2, which is the class that has been assigned to views in the area of KOP 4, should not be "evident." In Class 2, contrasts can be seen, but must not attract attention. In this area, lattice type towers would likely attract less attention than the poles.

DATA REQUEST

85. Please explain the reasons why concrete, single-pole structures are being proposed, and why lattice type towers are not.
86. Please provide new photo simulations (in 11" x 17" format) for KOPs 2, 3, 4 and 6 that show the proposed transmission line with conventional steel lattice transmission towers instead of poles.

BACKGROUND

In the KOP 4 discussion on page 5.9-15 of the petition, the concrete poles are described as "dark gray." However in the simulation (Figure 5.9-5b) the poles appear light gray, similar to the natural color of concrete. Where the poles have a backdrop of dark landforms, such as the mountains in the background of the view from KOP 4, somewhat darker gray poles would blend better.

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DATA REQUEST

87. Please provide a description of the color proposed for the concrete poles.
88. Please discuss the feasibility of obtaining concrete poles in colors other than the natural color of concrete that would blend better with the surrounding environment in specific conditions. The color that would best suit any particular pole would need to be determined on a case-by-case basis. The natural concrete colored poles would be best where the backdrop to the pole is only sky. However, where the backdrop is landforms, other possible color choices could be a somewhat darker gray than the gray color depicted in the KOP 4 simulation, or an earth tone color.

BACKGROUND

The reviewer for WAPA commented that it looks like the simulation (Figure 5.9-5b) of the transmission line as it would be seen from KOP 4 depicts the alternative Sub-Alignment 1 route and not the proposed route closer to I-10 to avoid the Alligator Rock ACEC (Cultural Resources).

DATA REQUEST

89. Please provide information that would allow an independent reviewer to verify that the proposed transmission line route is simulated correctly. If the incorrect route is depicted, please revise the simulation.

BACKGROUND

Under the discussion of Light and Glare, the petition states: “Normal lighting at the proposed [Midpoint] substation would consist of one low wattage light to guide workers from the entrance gate to the equipment control building with the facility dark most of the time” (page 5.9-16). Staff’s experience on past projects is that lights are needed for nighttime switching operations, which can occur on occasion.

DATA REQUEST

90. Please discuss if lights would be provided for nighttime switching operations. If so, please discuss how they would be designed and operated to minimize visual impacts.

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Technical Area: Waste Management

Author: Ramesh Sundareswaran

BACKGROUND

The proposed transmission line would traverse land or be adjacent to land where various commercial and industrial activities have occurred. Documented activities include but are not limited to mining, military operations, pipeline transport and agriculture. These uses have the strong potential to result in past releases or material threats of releases of hazardous substances, which can pose a risk to human health or the environment.

DATA REQUEST

91. Please elaborate on the due diligence efforts that have been undertaken in identifying potential sources of hazardous substance contamination, the specific contaminants involved and their location along the proposed transmission line path.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Worker Safety and Fire Protection

Authors: Geoff Lesh and Rick Tyler

BACKGROUND

The Petition for Amendment indicates that there is low probability for the proposed transmission line to cause fires along the proposed route. It does not actually indicate what agency will be responsible for performing fire mitigation maintenance activities along the right-of-way, such as possible trimming or removal of tall trees or thick brush should it be needed. Nor does it specifically indicate which fire districts will be responsible for fighting potential fires, or whether they have been informed of the planned construction and operation of the proposed transmission line.

DATA REQUEST

92. Please provide a list of contacts and agencies that will be responsible for fire mitigation maintenance activities. Please provide a list of contacts and their agencies that will be responsible for providing emergency response and for fighting any possible fires along the right-of-way of the proposed transmission line.

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

Technical Area: Alternatives

Author: Susan Lee

Under CEQA, alternatives analysis requires consideration of alternatives that have the potential to (a) meet most project objectives, and (b) reduce or eliminate impacts of the proposed project. The requests below help clarify the objectives of the Blythe Transmission Line Modifications or the Applicant's interpretation of these requirements in order that appropriate alternatives can be selected and evaluated.

BACKGROUND

One of the project objectives identified in AFC Section 3.5.2 (page 3-41) is to place the line in service by mid-2007. The schedule for completion of the Desert Southwest Transmission Project (DSWTP) is described as "unknown" (page 3-42). Given that this project already has a published Draft EIS/EIR, it seems that there is potential for it to move ahead and meet a 2007 in service date. It would be helpful in analyzing the viability of this potential alternative to have more firm information on its current status

DATA REQUESTS

93. Please provide a letter from IID or other evidence that is less speculative on the status of the DSWTP.
94. Section 3.5.4.2.2, page 3-47 states that the Alignment Adjacent to Blythe-Eagle Mountain Transmission Line would create visual impacts to "several areas in the eastern portion of the [Joshua Tree] National Park."
 - a. Please define the specific areas (i.e., trails or viewing areas) of the Park from which this transmission line would be visible and describe the park use that occurs in these areas.
 - b. Given that the Julian Hinds Substation itself is within one mile of the National Park boundary, any transmission line entering that substation would also be visible from areas within the Park (not only the Blythe-Eagle Mountain alternative) Please address park visibility for the Buck to Julian Hinds sub-alignment as well, with comparisons to the proposed route.

BACKGROUND

The necessity for the proposed new transmission line is described as providing transmission for the entire 520 MW capacity of the BEP. However, in the ongoing Energy Commission proceeding 02-AFC-01, a second 520 MW combined cycle power plant adjacent to BEP is being evaluated. Approval of a transmission line that would serve BEP but not BEP Phase II would require additional environmental impacts when transmission for the second facility is constructed.

95. Please explain whether the proposed new transmission line would accommodate any of the generation output of BEPII, and if so, how much. What upgrades would be required to the project as proposed in this amendment to accommodate the generation of both projects? For example, could the towers be constructed for a 500 kV line but conductors installed initially for 230 kV only?

Blythe Energy Transmission Line Amendment
Data Requests, (99-AFC-8C)

BACKGROUND

One factor in evaluation of alternatives is consideration of whether an alternative would reduce or eliminate the impacts of the proposed project. Given that the other major transmission line proposals described in AFC Section 3.5.3 (the DSWTP and DPV2) would be constructed also within the same corridor as the proposed new line to serve BEP, it is foreseeable at this time that all three of these projects could co-exist. Therefore, the cumulative impacts of these multiple facilities should be described in order that the alternatives analysis can adequately identify alternatives that might reduce impacts.

96. Please address the potential cumulative impacts of these three projects in visual resources, cultural resources, and biological resources.
97. Define specifically the width of the existing transmission DPV corridor, the width of the right-of-way required for the proposed project, and the space required for the DSWTP and DPV2 projects.
98. Explain whether it would be feasible for Blythe Energy to construct a 500 kV line in the DPV corridor (operating it at 230 kV until the remainder of the DPV2 line was constructed) to allow SCE and BEP to use the same line as a means of eliminating potential cumulative impacts of multiple lines.
99. The No Action Alternative needs to be more clearly defined in order that environmental impacts can be assessed, in compliance with NEPA and CEQA. The statement that "other transmission lines may have to be constructed" (AFC page 3-45) is inadequate for impact assessment. Specific other transmission lines should be described, along with their potential timing and routing. The No Action Alternative discussion should acknowledge other transmission upgrades that are being considered in various public planning processes (i.e., DPV2 which has been addressed in detail in the STEP group and by the WECC, and DSWTP for which a Draft EIS/EIR has been published).